**CHAPTER 6: CONSTRAINTS**

**MOCK INTERVIEW ANSWERS**

**1) WHAT ARE THE DIFFERENT CONSTRAINS AND KEYS AVAILABLE IN SQL SERVER?**

1. **NOT NULL** : This column does not allow NULLS. Means, mandatory column
2. **NULL** : This column allow nulls. Means, column value is optional.
3. **UNIQUE** : This column does not allow duplicates. Allows up to 1 null value
4. **PRIMARY KEY** : This column does not allow duplicates, Does not allow null value
5. **FOREIGN KEY** : This is used to **reference** / **link** one table to another table.
6. **CHECK CONSTRAINT** : Used to specify conditions on column values.
7. **DEFAULT CONSTRAINT**: Used to insert a default value to the column.
8. **IDENTITY PROPERTY** : Used to insert automated sequence of value. Ex: 1001, 1002....

**2) WHEN TO USE PRIMARY KEY CONSTRAINT?**

To ensure UNIQUE, NOT NULL Values into a column

Also to ensure faster access to the table data as Primary Key would auto create a Clustered Index.

**3) CAN WE DEFINE PRIMARY KEY ON MORE THAN ONE COLUMN?**

**Yes.**

**Such Primary Keys defined on more than one column are called Composite Primary Keys.**

**A Table can have only ONE primary key but that primary key can contain any number of columns inside it.**

**Example:**

CREATE TABLE TBLSTUDENTS

(

STD\_ID INT,

STD\_NAME VARCHAR(30),

STD\_AGE TINYINT CHECK (STD\_AGE >= 18),

CONSTRAINT PK\_COMPOSITE\_KEY **PRIMARY KEY(STD\_ID, STD\_NAME)**

)

**4) LIMITATIONS OF UNIQUE KEY CONSTRAINT?**

UNIQUE KEY ALLOWS UPTO ONE NULL VALUE ONLY.

**5) HOW MANY PRIMARY KEYS ARE POSSIBLE IN A TABLE?**

ONE.

**6) TO DEFINE A FK, WE NEED \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ KEYS.**

CANDIDATE KEYS

**7) IF A ROW HAS NULL VOILATION AND UNIQUE KEY VOILATION, WHICH OF THESE TAKES MORE PRIORITY?**

NULL VOILATION IS TAKEN MORE PRIORITY.

**8) WHENEVER WE DEFINE A PRIMARY KEY, WHAT OTHER OBJECT(S) ARE AUTO CREATED?**

INDEX

**9) WHAT ARE THE LIMITATIONS OF IDENTITY PROPERTY?**

IDENTITY PROPERTY VALUES ARE USED TO AUTO GENERATE INTEGER VALUES ONLY.

IDENTITY PROPERTY VALUES CAN BE DUPLICATED. HENCE IN REAL-WORLD USAGE WE NEED TO ENSURE CANDIDATE KEY (EITHER PRIMARY KEY OR INIQUE KEY) ON THE IDENTITY COLUMNS:

CREATE TABLE TBLSTAFF

(

STF\_ID INT IDENTITY(100001, 1) PRIMARY KEY,

STF\_NAME VARCHAR(30) NOT NULL,

STF\_GENDER CHAR CHECK (STF\_GENDER IN ('M','F')) DEFAULT 'F',

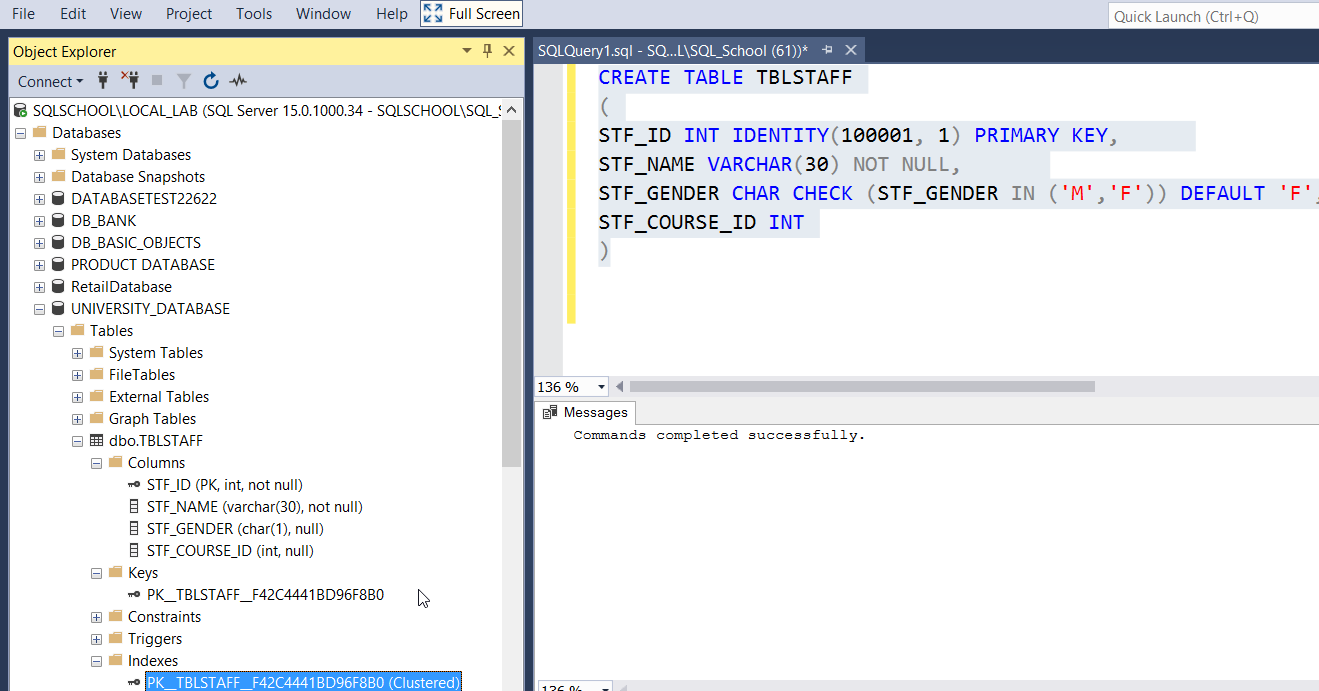
STF\_COURSE\_ID INT

)

**10) HOW DO YOU VERIFY THE KEYS IN A GIVEN TABLE?**

FROM SSMS TOOL > EXPAND DATABASE > EXPAND TABLES > SELECT REQUIRED TABLE > EXPAND >

WE SEE "KEYS" THAT TABLE :

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